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**FENCING AND FENCING MOUNTINGS****Field of the Invention**

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The present invention relates to temporary fencing and also to mounting devices to mount barriers associated therewith.

**Background of the Invention**

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For many years it has been considered desirable to provide fencing around building sites in order to prevent unauthorised persons and particularly children entering the site and possibly injuring themselves. In recent years such fencing has become compulsory in many jurisdictions. Typically this fencing comprises chain wire panels supported by tubular 15 galvanised steel uprights themselves supported and located by having their bases inserted in appropriately-sized holes in concrete blocks. It is therefore concrete blocks which support the fence in place rather than having the lower extremities of the uprights buried in the ground as with a permanent fence.

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Generally the concrete blocks are extremely heavy and exceed recommended guidelines for manual handling safe practices for a single person.

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Also, more recently there has also been a requirement for building sites to incorporate silt fences. These silt fences are intended to prevent erosion and movement of exposed soil from the building site on to adjacent properties. Typically these silt fences comprised a relatively fine thermoplastic mesh buried in the ground at its base and supported in an upright position by attachment to stakes at discrete intervals. Typically silt fences are constructed parallel to safety fencing but spaced therefrom. A silt fence may typically stand approximately one metre inside a safety fence and must be taken down and re-erected when 30 machinery, equipment or building materials enter or leave a site when gate access is not suitable. The space in between the safety fence and the silt fence is also difficult to maintain

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free of weeds. The dual requirement of a silt fence and a temporary safety fence is therefore cumbersome to construct and inconvenient to maintain during the course of building objects.

Known methods of connecting silt fences to posts generally involve staples or other  
5 fasteners which are time consuming and inflexible.

The present invention seeks to ameliorate one or more of the above-mentioned  
disadvantages.

#### 10 Summary of the Invention

According to one aspect of the present invention there is provided a temporary fence including a barrier assembly, the barrier assembly including: one or more posts; one or more fence panels associated with respective posts and mounted thereon; one or more anchors for  
15 anchoring the or each post; the or each anchor including a first anchor element and a second anchor element and a cleft disposed between each anchor element when assembled.

Preferably a silt barrier is provided, which is operatively connectable to the barrier assembly in such an arrangement that the silt barrier when installed extends generally parallel  
20 with the fence panels.

Preferably, the cleft extends generally parallel with the fence panels when installed, such that some portions of the silt barrier are disposed at least partially within the cleft of the anchor when installed.

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Preferably, the cleft is disposed generally vertically when the fence is assembled, and in preferred forms the cleft is provided generally transversely across the entire depth of the anchor, between the first piece and the second piece.

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The first and second pieces may be similar in size construction and materials, however, some embodiments include differing sizing and constructions of the first and second

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pieces. In one embodiment the first and second pieces are both blocks, in one form constructed from concrete. The or each block is a generally rectangular prism having a longitudinal axis which in use is disposed in generally perpendicular to a plane defined by the fence panels when installed, so as to provide stability from push over or lateral forces.

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Preferably, the or each block includes apertures for receiving base portions of respective posts. Support for the post is provided by internal walls of the apertures. In preferred embodiments the apertures are through apertures which extend from an upper face of the or each block to a base face of the or each block when installed upright.

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Coupling means may be provided to couple two blocks together, so that the posts may access a doubling of anchor mass if required. In one form the coupling means is a separate and distinct conventional fastening feature, such as a belt, bolts, strap, tongue and groove, key and keyway, bar and aperture, or the like. In another form the coupling means is provided by 15 an aperture, which is fully formed when two pieces of a mounting assembly are brought together and selected faces abut one another. In one embodiment, each face incorporates a hollow in the form of half cylinder being cut along a longitudinal axis. This half cylindrical aperture is completed when the face is mated with another mounting assembly block with corresponding recesses therein. To assemble this portion of the barrier assembly, the aperture 20 receives, in this embodiment, a cylindrical post. The post may also be RHS steel or aluminium.

Preferably the apertures are located along the mating wall, adjacent an end thereof. This is so as to allow the post and block to be given the greatest leverage to resist push over in 25 one of the lateral directions.

In preferred embodiments the second piece of the anchor is in the form of a plate which has a longitudinal axis which when installed extends perpendicular to the fence panels to provide extra stability. The plate presents a lower height profile which reduces the 30 likelihood of becoming a trip hazard to passers by.

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The or each plate also includes one or more post receiving apertures, each of which support the posts in a generally upright orientation when assembled therein.

In some embodiments the posts may be mounted on a spigot, protrusion or boss 5 extending from an anchor piece of smaller external diameter than the internal diameter of the post.

In preferred embodiments a base portion of the silt barrier is placed in a trench which 10 is dug into the ground, and the trench filled in. This is to comply with best practice on the installation of silt barriers.

In situations where digging a trench is not possible or not economically viable, such as on concrete or rock beds, concrete or mortar may be poured to weight the base portion of the 15 silt barrier downwards.

A restriction assembly may be provided to restrict the gap between the ground and a base portion of the fence panel. The assembly may include a bracket and a post, laid 20 horizontally to engage a sandbag and the silt barrier simultaneously. The bracket may pivot to encourage downward pressure onto the silt barrier and the ground.

It is preferred that two posts support each fence panel. However in some situations it 25 may be preferred that two panels are mounted to each post. This may suit differing designs of panel.

According to another aspect of the present invention there is provided a temporary fence which includes an anchor including a first post mounting for receiving a post of a first fence and a second post mounting for receiving a post of a second fence, the post mountings being spaced apart from one another.

The first fence may be in the form of a barrier fence and the second fence may be in 30 the form of a silt fence. Preferably the post mountings are arranged so that when the fences

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are erected they extend generally parallel to one another.

Preferably the second post mounting is for use with a silt fence and disposed adjacent a side of the anchor so that the fence can extend into the earth upon which the fence is  
5 erected.

The anchor may be in the form of a block formed from any suitable material such as concrete, timber, plastics and the like. Preferably the blocks are in the form of concrete blocks. The post mounting for the first fence may be in the form of an aperture extending into  
10 the block from an upper surface thereof.

In one embodiment the post mounting for the second fence may be in the form of a keyed slot in the block which is adapted to cooperate with a complimentary shaped lower portion of the post for the second fence. The keyed slot may be any suitable shape, such as  
15 for example square, rectangular, round or T-shaped, (or the like) extending into the block from the top surface thereof.

In another embodiment the block includes mounting lugs thereon which cooperate with lugs on the post of the second fence so that they can clip together.

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According to still another aspect of the present invention there is provided a temporary fence which includes: an anchor including a first post mounting for receiving a post of a first fence; a mounting bracket for receiving an upper portion of a second fence, the mounting bracket being connected to or integral with the post of the first fence; and attachment means  
25 for attaching the upper portion, the attachment means disposed at a distal end of the mounting bracket, the distal end being spaced sufficiently from the post so that when assembled, the upper portion is disposed generally vertically above a base portion of the second fence.

The first fence may be in the form of a barrier fence and the second fence may be in  
30 the form of a silt fence. Preferably the mountings are arranged so that when the fences are erected they extend generally parallel to one another. The barrier fence preferably includes a

plurality of fence panels, each having a pair of posts, supporting an infill panel of wire mesh, suitable for inhibiting access to an area. The silt fence is generally in the form of a geotextile fabric, which in one embodiment has a belt sewn into the top of the fabric for strengthening or for supplementary connection to attachment means.

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Preferably the mounting bracket is for use with the silt fence. The attachment means is disposed in relation to the anchor such that the fence can extend into the earth upon which the fence is erected.

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The mounting bracket may be integral with or connected to the post for the first fence. The mounting bracket may be any suitable shape, however, in preferred embodiments the mounting bracket is a trapezoidal or triangular shape, tapering downwards toward the attachment means in order to provide increased moment resistance at the interface between the mounting bracket and the post for the first fence.

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The anchor may be in the form of a block formed from any suitable material such as concrete, timber, plastics and the like. Preferably the blocks are in the form of concrete blocks. The post mounting for the first fence may be in the form of an aperture extending into the block from an upper surface thereof.

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According to yet another aspect of the present invention there is provided a fence mounting device for mounting a fence to a fence post, the device including a main body which is mountable to the fence post and an attachment on the main body to which the fence can be releasably secured.

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In one form the main body includes an end cap which is adapted to be fitted over a top end portion of the fence post. The end cap may include a cap body having a hollow section therein for receiving the top end portion of the fence post. The cap body may include a dome shaped upper portion with a skirt extending downwardly therefrom. The attachment may be in the form of a hook-like element secured to or integral with the wall of the cap body.

The fence mounting device may be used to support a silt fence which as described earlier may be of a fine mesh material. The material may include eyelets which can be placed over the hook-like elements to retain it in position, or the material may include a belt sewn into a hem in the top of the barrier, the hem slots through which the belt may be withdrawn to 5 fasten the belt to the hook-like elements.

In another form of the invention the mounting device is suitable for use with fence posts of the type commonly referred to as star posts. Star posts generally comprise an elongated body having a plurality of radially extending flanges angularly disposed with 10 respect to one another the flanges extending the length of the post, the flanges extending generally radially from a central axis of the post body.

The fence mounting device may include tensioning means for tensioning the upper portion so that the silt fence maybe held more tightly against the posts, at least in the region of 15 the upper portion.

In one form, the tensioning means is a ratchet so that the main body does not need to be removed from the post in order to tension the belt. Preferably, the ratchet is in the form of one or more angled teeth which are moulded into the internal walls of the main body and 20 projecting into the hollow section therefrom. The teeth are arranged such that when the main body is rotated in a tightening direction, the teeth are forced flat against the internal walls of the main body by the edges or the walls of the post. When the tension of the belt or fence causes the main body to rotate in a loosening direction, the teeth are forced into an open locking position, extending further into the hollow section by the walls or edges of the post, 25 blocking rotation of the main body relative to the post.

Preferably, another embodiment of tensioning means includes a socket in the form of a plurality of locking recesses within the main body hollow section which correspond to respective edge formations on the post.

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Preferably, a socket of eight recesses is provided at the inner walls of the hollow

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section.

Preferably, every second recess receives a respective corner of a square post when the cap is mounted on the post.

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Preferably, the end cap draws the belt from its hem, thus tightening the upper edge of the silt fence.

10 Preferably, wherein locking recesses are defined by spaced, tapering dividers extending from inner skirt walls so as to lock several sizes of star picket and square posts.

Preferably, the attachment includes a flange spaced from the skirt wall by a boss so as to improve retention of a belt behind the flange.

15 Preferably, the skirt includes one or more recesses for receiving a belt so as to improve and simplify smooth running and tying of the belt around the attachment means.

20 Preferably, the recesses are one or more cut outs adjacent the attachment means, the cut outs at the base of the skirt.

25 Preferably, the flange includes one or more cut outs at its base to aid smooth tying of belt or and cleat.

Preferably, the recesses are one or more cut outs adjacent the attachment means, the cut outs at the base of the skirt. The recesses or cut outs assist with allowing the belt to run or be directed under the skirt to bear against the post. This improves friction and holds the post and cap together in a more secure fashion.

30 Preferably, ribs are provided to support edges of posts received by the main body.

Another embodiment of tensioning means includes a plurality of recesses within the

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main body hollow section which correspond to respective edge formations on the post.

In one form, eight recesses are provided at the inner walls of the hollow section. In this embodiment, every second recess mates with a respective edge of a square post when the 5 cap is mounted on the post. Thus the cap may be rotated in increments of 45° by either rotating the cap whilst on the post, forcing the edges of the post into an adjacent recess and interlocking therewith, or lifting the cap off the post, rotating the cap and replacing the cap at a tightened position further around the posts.

10 Rotating the end cap draws the belt from its hem, thus tightening the upper edge of the silt fence.

According to another aspect of the present invention there is provided a fence mounting device for mounting a fence to a post, the fence mounting device including: a 15 releasable clamp attachable to a post so that at least a portion of the fence may be received in the clamp and releasably retained adjacent the post.

Preferably, the releasable clamp includes two detachable parts.

20 Preferably, a first part is a receiver and the second part is a key which mates with the receiver.

Preferably, the receiver is mountable to the post.

25 Preferably, the receiver includes a receiving void between spaced-apart walls for receiving a fence therein.

Preferably, a pair of the spaced-apart walls taper towards one another.

30 Preferably, the taper is towards a front face when the receiver is installed on the post.

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Preferably, the void is enclosed by three spaced-apart walls, to define an open face to reduce mass and allow ease of assembly of fence.

Preferably, the key includes a main key body for inserting into the receiver, and when 5 assembled, the fence is laid in the receiver, and the main key body is disposed parallel with a main longitudinal axis of the receiver, so the main key body abuts at least some of the spaced-apart walls of the receiver in order to clamp the fence to the post.

Preferably, the key corresponds in cross-section to the receiver, although slightly 10 smaller in size to allow for the fence to be lodged within a play space between key and receiver.

Preferably, the fence is a textile fence, in the form of a silt barrier.

15 Preferably, the key is provided with a depth step.

Preferably, the key is inserted from an open end above the received when mounted on a post.

## 20 **Brief Description of the Drawings**

Some preferred embodiments of the present invention will now be described with reference to the accompanying drawings in which:

25 Figure 1 is a side elevation view of prior art temporary fencing;

Figure 2 is a side elevation of temporary fencing of a preferred embodiment of the present invention;

30 Figure 3 is a plan view of temporary fencing according to a preferred embodiment of the present invention;

Figure 4 is a side elevation view of a temporary fence according to a preferred embodiment of the present invention;

5 Figure 5 is a side elevation of temporary fencing in accordance with a preferred embodiment of the present invention;

Figure 6 is a side elevation of temporary fencing in accordance with a preferred embodiment of the present invention;

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Figure 7 is a side elevation of temporary fencing in accordance with a preferred embodiment of the present invention;

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Figure 8 is an isometric view of temporary fencing in accordance with a preferred

embodiment of the present invention;

Figure 9 is a side elevation view of a temporary fence and fence mounts in accordance with a preferred embodiment of the present invention;

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Figure 10 is a side elevation view of a temporary fence and fence mounts in accordance with a preferred embodiment of the present invention;

Figure 11 is a side elevation view of a temporary fence and fence mounts in accordance with a preferred embodiment of the present invention;

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Figure 12 is a side elevation view of a temporary fence and fence mounts in accordance with a preferred embodiment of the present invention;

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Figure 13 is an isometric view of a fence assembly showing a detail of a fence mounting device according to a preferred embodiment of the present invention;

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Figure 14 is a side elevation view of a fence mounting device according to a preferred embodiment of the present invention;

5 Figure 15 is a plan view from underneath of a fence mounting device having a socket according to a preferred embodiment of the present invention;

Figure 16 is a plan view from underneath of a fence mounting device having a ratchet according to another preferred embodiment of the present invention;

10 Figure 17 is an isometric view from underneath of a fence mounting device having a plurality of locking recesses according to another preferred embodiment of the present invention;

15 Figure 17A is an isometric view from above of a fence mounting device showing recesses for smooth tying of silt fence belt;

Figure 18 is a plan view from underneath of the fence mounting device shown in Figs 13, 14, 16 and 17, being mounted on a square post, held by walls of locking recesses which abut edges of the post;

20 Figure 19 is a plan view from underneath of the fence mounting device shown in Figs 13, 14, 16 and 17, being mounted on a star post, which is mounted further into the device and held by walls of locking recesses which abut edges of the post;

25 Figure 20 is a plan view from underneath of the fence mounting device shown in Figs 13, 14, 16 and 17, being mounted on a star post of different dimension than that shown in Fig 19;

30 Figure 21 is a plan view from underneath of the fence mounting device shown in Figs 13, 14, 16 and 17, being mounted on a square post of different dimension than that shown in

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Fig 18, interior ribs not extending down to the skirt so as to allow the vertices of the square post to abut interior walls of the skirt;

5 Figure 22 is an isometric view of a part of a fence mounting device, being a receiver, which is according to a preferred embodiment of the present invention;

Figure 23 is an isometric view of a second part of a fence mounting device, being a key, which is according to another preferred embodiment of the present invention;

10 Figure 24 is a plan view, partly exploded, of the fence mounting assembly of Figures 22 and 23.

#### **Detailed Description of Preferred Embodiments**

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It will be observed from Figure 1 that known temporary safety fencing comprises a number of chain wire or mesh fencing panels placed in end to end collinear relationship with each other with bases 2 of tubular posts 3 forming ends of each panel being inserted into tubular holes (not shown) in concrete blocks 4 in order to provide support for the fencing. It 20 will be observed that each concrete block 4 receives the bases 2 of tubular posts 3 being tubular posts defining the ends of adjacent panels. Typically the concrete blocks extend for a significant distance laterally out from each side of the fence as is best viewed in Figure 1.

25 Typically a silt fence is erected at one side of the temporary safety fencing, the one side being generally associated with a building site. This silt fence comprises a relatively fine thermoplastic mesh 6 buried in the ground at its base 7 and supported vertically by stakes 8 which are buried in the ground. As is best viewed in Figure 1 the silt fence is typically spaced approximately one metre from the temporary safety fencing.

30 According to a preferred embodiment of the present invention depicted in Figure 2, posts 3 of adjacent fencing panels are placed side-by-side rather than in collinear relationship

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with each other. In the preferred embodiment shown, a cleft 9 is provided, disposed across the entire depth of an intermediate portion of an anchor which includes two pieces, 12, the cleft 9 extending further between the posts 3. The two-piece construction facilitates easier carrying of the anchor as the anchor may be carried in two trips by a single person, rather than 5 risking a back injury by carrying the whole article at one time. The two-piece construction also facilitates the provision of a cleft suitable for placement of a continuous silt barrier 10 between the pieces and posts so that silt barrier 10 may run along the length of the temporary safety fencing and be at least partially supported thereby.

10 It will be observed that in order for the silt barrier 10 having a base 11 buried in the ground to pass through the area where the lower extremities of posts 3 forming the ends of adjacent fencing are supported in anchors 20 in the form of 2-piece mounting assembly 21 in the form of stabilising concrete blocks 12 it is necessary that the base of each adjacent post 3 is supported in an aperture 22 in the form of a tubular hole 13 (best viewed in Figure 3) of a 15 respective block 12. The use of two separate blocks 12 where each separate fence panel meets its adjacent fence panel together with the side-by-side rather than end to end orientation of the posts 3 ensures that a cleft between the blocks and posts 3 maybe maintained in order that a silt fence 10 may pass in an uninterrupted manner through the cleft 9.

20 It will be appreciated that the orientation of the concrete blocks 12 and posts 3 depicted in Figures 2 and 3 permits attachment of the silt barrier 10 to the safety fence and without the necessity for separate stakes 8 to support the silt fence. The resulting composite silt barrier and temporary safety fence is far neater than in the prior art arrangement depicted in Figure 1 and furthermore is a simple matter to clear the area about the composite fence.

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It will be observed that stock yard clamps 15 may be placed at positions 16 and 14 above the top of the silt barrier in order to tie adjacent posts 3 to each other thereby ensuring that the combined stability of both concrete blocks 12 is available to each post 3.

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It should be appreciated that in certain situations only one concrete block 12 may be necessary to stabilise each pair of adjacent posts 3 due to the fact that stock yard clamps 15

join adjacent posts. For example as shown in Figure 4, where a safety fence immediately abuts and runs parallel to a footpath the base of one of a pair of adjacent posts 3 may simply be provided with a horizontal laterally-extending steel plate (112) in order to assist in bracing the fence against tipping over the footpath; the adjacent post foot being inserted in a weighted 5 concrete block 12. Unlike concrete blocks, a horizontal laterally extending non ballasted steel plate would present less of a trip hazard on a footpath.

Referring to Figure 5, there is shown a fence according to another preferred embodiment of the present invention. A single post is provided at 103 and a support 130 is 10 connected thereto. The base portions 131 and 132 of the post 103 and its support 130 respectively, are received into apertures 113 of separate blocks. The fixed connections at the top of support 130 provides stiffness and a rigid connection, albeit remote, from the anchor assembly 135.

15 Hooks 136 and 137 are provided, mounted on the post 103, on which to hang a fence panel 101. A retaining means 138 in the form of a clamp 139 is provided to secure the panel 101 to the post 103.

As shown in Figure 8, the silt barrier 110 in the form of a geotextile 140 alternates 20 between one side of the fence panels and the other side, the geotextile 140 however always stays in the cleft 109 between the two piece mounting assembly and posts 103.

Referring to Figure 5, the anchor 120 is in the form of two concrete blocks 112. A coupling means 142 in the form of apertures 143 and 145 are provided. The apertures 143 25 and 145 are half cylinders, cut along a longitudinal axis. The recesses 143 and 145 are cut into corresponding base faces of the concrete block 112. The faces are abutted to assemble, and the post 103 is inserted into the complete aperture, coupling the blocks 112 together. In this way, the blocks 112 may restrain the post 103 from lateral forces.

30 Generally, a base of the silt barrier is buried in a trench as shown at 150. When this is not possible, such as in the case of a rock floor, sandbags 851 (Figure 7 or Figure 4) may be

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provided, or concrete poured on the base portion of the silt barrier. A pivoting bracket assembly 870 (Figure 7) is provided to engage geotextile 840 and possibly sandbag 851.

Various embodiments are shown throughout Figures 2-8, wherein like numerals 5 denote like parts.

Referring to Figure 9, there is shown a schematic side elevation of a temporary fence 910 which includes an anchor 912 in the form of a concrete block 913 which includes a first post mounting 915 for a post 916 of a first fence and a second post mounting 917 for a post 10 918 of a second fence. The first fence is in the form of a barrier fence whereby wire mesh is mounted to the posts to inhibit access to a site. The second fence is in the form of a silt fence which includes a geotextile or thermoplastic mesh 920 secured to post 918. As shown the lower side portion of the mesh 920 is buried in the ground. In alternative embodiments, the lower side portion 920 is weighted with sand bags or concrete blocks, or weighted with loose 15 gravel.

The first post mounting 915 is in the form of an aperture 921 extending into the anchor block from the top surface thereof. The cross-section dimension of the aperture 921 is complimentary to the cross sectional dimension of the post 916. The second post mounting 20 917 is in the form of a T-shaped slot 922 which extends into the anchor block from the top surface thereof. The lower end portion of post 918 is complimentary in shape so as to be receivable within the slot. The post 918 further includes an attachment 924 to which the mesh 920 can be fitted.

25 Figure 10 shows a similar arrangement to that shown in Figure 26, however, the T-shaped slot 922 has been changed to a round aperture 1022.

Referring to Figure 11, which is a side elevation of a temporary fence according to a further embodiment like reference numerals have been used to identify like parts as used in 30 Figure 9. In this particular embodiment the post 918 for the silt fence includes a clip arrangement by which it can be releasably clipped to the anchor block 912. The clip

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arrangement includes a leg 930 at the base of the post 918 which can be received within a recess 931 in the anchor block. The clip arrangement further includes a clipping arm 932 which in a mounted position is fitted behind a shoulder 933 on the upper side of the anchor block to retain the post in position.

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Referring to Figure 12, there is shown a bracket having end 924 including a cleat. The bracket extends an attachment point for a silt fence 920 so it can be mounted vertically and buried in the ground at its base.

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Figure 13 illustrates an embodiment of silt fence using fence mounting devices according to another aspect of the present invention. Referring to Figure 13, there is shown a silt fence 950 which includes a plurality of fence posts 951 to which a mesh barrier material 952 is releasably mounted. In Figure 13 the fence posts are in the form of stakes 955.

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The fence mounting device 965 for use in the embodiment shown in Figure 13 is best illustrated in Figures 14-21.

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In the embodiment shown in Figures 14-21, the mounting device is in the form of an end cap 970 including a hollow body 971 receivable over the top of the post and an attachment 972 to which the mesh can be mounted.

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Advantageously, preferred embodiments such as for example Figures 2-12 of the present invention are easier to install as the lifting required for each anchor is reduced. That is, a single man may carry the fence to site and install it single-handedly as per safe work practices. This is facilitated by the or each anchor being in two pieces, each of which may be carried by one person. Back injuries are one of the most common injuries in the construction industry.

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Also, preferred embodiments of the present invention provide advantages of stronger sediment control and easier and faster installation of sediment control fences than known devices, as well as the rounded cap of Figures 13-21 providing a safety aspect from cuts,

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grazes, abrasions, and reducing injury in the event of a fall thereagainst. The cap of Figures 13-21 also provides a taut upper edge which provides stronger and longer lasting sediment control.

5 Referring to Figure 16, a tensioning means 75 is shown integral with an end cap 70. The tensioning means 75 is in the form of a ratchet 76 having a plurality of angled teeth 77. The attachment 72 in the form of a cleat 73 acts as a hook to receive a belt 74 (Figure 13).

10 In operation, the end cap 70 is turned in a tensioning direction, and the teeth 77 are forced flat against the internal periphery of the hollow body 71 by the edges of a square post 55. This allows tightening with relative ease, and the belt 74 is drawn out of its hem to tighten the top edge of the silt barrier 6.

15 When the belt 74 draws the end cap 70 in a loosening direction, the teeth 77 are forced by the edges of the post 55 into an open or locking position, pointing into the centre void of the hollow body.

20 Figure 15 shows a second embodiment of tensioning device 175 integral with an end cap 170. The tensioning device 175 is in the form of a plurality of recesses 178 which form a socket and mate with edges of the post 55 when assembled. In the embodiment shown, eight recesses 178 are indicated, which allows locking rotation in 45° increments. Of course, in the embodiment shown, only every second recess engages a respective edge of a square post 55. Tightening may be effected by turning and thus forcing the recesses open, similar to a ratchet, or by lifting the cap off and replacing the cap at a different angular position.

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Further, Figures 17-21 and similar arrangements may be used on most types of square post, peg, pipe or fence picket (e.g. metal "star" picket) to provide three benefits:

- a safety cap
- silt fence support via lug or clip
- 30 - tension adjustment by turning cap

They may vary in structure and appearance but can achieve the above features, for example, Figure 17 shown tensioning device 275 includes recesses 278 which abut edges of posts or pickets. Walls 279 are tapered to accommodate various sizes of posts and pickets at different depths within the hollow body.

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Figures 17 and 17A show recesses 285-287 which are used to promote smooth tying of the belt so that lumps are not formed when tying knots. The recesses also alleviate localised stress and bruising of belt, extending its life.

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Referring to Figures 22-24, a clamp is shown. The clamp is in two pieces, having a female receiver 84 and a key 85. The receiver has a void 89 and the silt barrier 6 is held against internal periphery of the void 89 by the key 85 when assembled in order to provide some tensioning when assembled.

15

A depth stop 86 is provided by a cross member 87. The receiving member 84 has tapering walls and an open edge, so that the silt barrier may be easily loaded and securely retained in the clamp 79. The key 85 in cross-section, corresponds with receiving member 84, so as to snugly mate with the receiver 84.

20

Throughout this specification and the claims which follow, unless the context requires otherwise, the word "comprise", and variations such as "comprises" or "comprising", will be understood to imply the inclusion of a stated integer or step or group of integers or steps but not the exclusion of any other integer or step or group of integers or steps.

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Finally, it is to be understood that various alterations, modifications and/or additions may be incorporated into the various constructions and arrangements of parts without departing from the spirit or ambit of the invention.